AFFIDAVIT

STATE OF GEORGIA

COUNTY OF FULTON

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared W. Keith Milner, who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in Case No. 2003-00379, Review of Federal Communications Commission's Triennial Review Order Regarding Unbundling Requirements for Individual Network Elements, and if present before the Commission and duly sworn, his rebuttal testimony would be set forth in the annexed testimony consisting of /5 pages and O exhibits.

W. Keith Milner

SWORN TO AND SUBSCRIBED BEFORE ME THIS 27 DAY OF MARCH, 2004

Evelyn Parks Peters Notary Public, Newton County, Georgia

My Commission Expires May 12, 2007

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF W. KEITH MILNER
3		BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION
4		DOCKET NO. 2003-00379
5		MARCH 31, 2004
6		
7	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	A.	My name is W. Keith Milner. My business address is 675 West Peachtree Street
12		Atlanta, Georgia 30375. I am Assistant Vice President - Interconnection
13		Operations for BellSouth.
14		
15	Q.	ARE YOU THE SAME W. KEITH MILNER THAT FILED DIRECT TESTIMONY
16		IN THIS PROCEEDING?
17		
18	A.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY FILED TODAY?
21		
22	A.	My testimony provides rebuttal to the direct testimony of Mr. Jay M. Bradbury and
23		Mr. Steven E. Turner on behalf of AT&T Communications of the Southern States,
24		LLC.
25		

2		PORTIONS OF THE TRO AND THE RULES IN SUPPORT OF THEIR
3		POSITIONS IN THEIR DIRECT TESTIMONY. WHAT IS THE IMPACT OF THE
4		D.C. CIRCUIT COURT OF APPEALS ORDER ON THE TRO IN THIS
5		PROCEEDING?
6		
7	A.	Currently the impact of the DC Circuit Court's opinion is unclear. At the time of
8		filing this testimony, the DC Court had vacated large portions of the rules
9		promulgated as a result of the TRO, but stayed the effective date of the opinion
10		for at least sixty days. Therefore my understanding is that the TRO remains
11		intact for now, but its content, and the rules adopted thereto, must be suspect in
12		light of the court's harsh condemnation of large portions of the order.
13		Accordingly, I will reserve judgment, and the right to supplement my testimony as
14		circumstances dictate, with regard to the ultimate impact of the DC Court's order
15		on this case.
16		
17	Rebu	uttal to Mr. Bradbury
18	Q.	ON PAGE 7 OF HIS TESTIMONY, MR. BRADBURY CONTENDS "THE
19		LEGACY ILEC NETWORK ARCHITECTURE PROVIDES AN INEFFICIENT
20		AND UNECONOMIC MEANS FOR A CLEC THAT TRIES TO CONNECT
21		THOSE SAME LOOPS TO ITS SWITCH THAT IS <u>ALWAYS</u> REMOTELY
22		LOCATED FROM THE ILEC CENTRAL OFFICE WHERE THESE LOOPS
23		TERMINATE." [Emphasis added] HOW DO YOU RESPOND?
24		
25	A.	Despite Mr. Bradbury's characterization to the contrary, there is no requirement

ALL PARTIES HAVE DIRECTED THIS COMMISSION TO VARIOUS

Q.

that Competitive Local Exchange Carriers ("CLECs") install their local switch at some location other than the Incumbent Local Exchange Carrier's ("ILEC's") central office building. CLECs have the option to place switches in their collocation arrangements in BellSouth's central offices – an option Mr. Bradbury has overlooked.

Q. ON PAGE 8 OF HIS TESTIMONY, MR. BRADBURY QUOTES THE FEDERAL COMMUNICATIONS COMMISSION ("FCC") AS SAYING "THE NEED TO BACKHAUL THE CIRCUIT DERIVES FROM THE USE OF A SWITCH LOCATED IN A LOCATION RELATIVELY FAR FROM THE END USER'S PREMISES, WHICH EFFECTIVELY REQUIRES COMPETITORS TO DEPLOY MUCH LONGER LOOPS THAN THE INCUMBENT." PLEASE RESPOND.

Α.

Mr. Bradbury correctly quotes the FCC. However, I disagree with the assertion that a CLEC's switch will be "relatively far" from the end user's premises. The CLEC could, for example, house its switch in a building directly across the street from the ILEC's central office, assuming it elected not to put the switch in its collocation arrangement in that ILEC central office. In such a case, the loop would not be "much longer." More importantly, however, the Commission should recall that during recent proceedings regarding the CLECs' eligibility for reciprocal compensation for tandem switching, CLECs uniformly argued that: (1) their switches covered very large stretches of geography; and (2) the CLEC's architecture of choice featuring fewer switches and shorter loops as compared to incumbents' networks yielded significant benefits. In my direct testimony in this proceeding, I cited the testimony of Mr. Gregory Follensbee, on behalf of AT&T,

1		in which he explained the long "reach" of AT&T's switches in Kentucky. I find it
2		somewhat ironic that the network characteristic that this CLEC touted as
3		advantageous in order to obtain greater compensation from BellSouth now
4		suddenly constitutes grounds for CLEC claims of "impairment."
5		
6	Q.	ON PAGE 8 OF HIS TESTIMONY, MR. BRADBURY STATES "THE CLEC
7		BACKHAUL COSTS INCLUDE THE NON-RECURRING COSTS NECESSARY
8		TO ESTABLISH A COLLOCATION ARRANGEMENT <u>IN EVERY ILEC WIRE</u>
9		CENTER IN WHICH THE CLEC WISHES TO OFFER MASS MARKET
10		SERVICES" [Emphasis added] HOW DO YOU RESPOND?
11		
12	A.	Apparently, AT&T has chosen to assume that collocation in each wire center is
13		required. However, as I noted in my direct testimony in this proceeding,
14		BellSouth's Analysis of Competitive Entry ("BACE") model accommodates the
15		assumption that the CLEC <u>may</u> collocate in every ILEC central office in order to
16		serve mass market customers. BellSouth's BACE model also allows the CLEC
17		to collocate in some, but not all, ILEC central offices and use the so-called
18		Enhanced Extended Link ("EEL") to serve those mass market customers whose
19		loops terminate in ILEC central offices in which the CLEC is <u>not</u> collocated.
20		
21	Q.	ON PAGE 9 OF HIS TESTIMONY, MR. BRADBURY INSISTS THAT THE CLEC
22		"MUST PAY EXORBITANT CHARGES TO THE ILEC FOR TRANSFERRING
23		LOOPS FROM THE ILEC SWITCH TO A CLEC COLLOCATION FACILITY, OR
24		FROM ONE CLEC TO ANOTHER." TO WHAT CHARGES DOES MR.

BRADBURY REFER?

A. Apparently, Mr. Bradbury refers to the rates set by this Commission for the ordering and provisioning of unbundled loops. I disagree with Mr. Bradbury that the charges are "exorbitant," and he does not explain the basis for his claim. To my knowledge, AT&T has not challenged the "hot cut" rates established by the Commission to disconnect a loop from BellSouth's switch and then re-connect that same loop to the CLEC's facilities. One would expect AT&T to do so if it truly believed that such rates were "exorbitant," as Mr. Bradbury now claims.

Q. ON PAGE 9 OF HIS TESTIMONY, MR. BRADBURY TAKES ISSUE WITH THE TRANSFER PROCESS, CONTENDING THAT THE PROCESS IS INFERIOR IN COMPARISION TO UNE-P CHANGES OR THE PRIMARY INTEREXCHANGE CARRIER ("PIC") CHANGE PROCESS. ARE THESE COMPARISONS VALID?

A.

No. The two (2) processes which Mr. Bradbury prefers (that is, use of UNE-P or the use of PIC change capabilities) are billing changes that are effectuated without the need to make physical changes to the ILEC's network. The hot cut process, on the other hand, requires physical work within the ILEC's network to remove the loop from the ILEC's switch and then to re-connect that loop to the CLEC's facilities including the CLEC's switch. There are profound dissimilarities between the processes Mr. Bradbury apparently wishes could be used for "hot cuts" and the processes that are actually used. Most importantly, he offers no replacement for or improvements to the "hot cut" process that AT&T and BellSouth jointly developed and which is in use daily across BellSouth's nine-state region.

1 Q. ON PAGE 15 OF HIS TESTIMONY, MR. BRADBURY QUOTES THE FCC AS 2 SAYING "NO PARTY SERIOUSLY ASSERTS THAT COMPETITIVE LECS ARE SELF-DEPLOYING COPPER LOOPS TO PROVIDE TELECOMMUNICATIONS 3 SERVICES TO THE MASS MARKET." PLEASE RESPOND. 4 5 While Mr. Bradbury accurately quotes the FCC, in the referenced passage, the 6 Α. 7 FCC merely pointed out that CLECs were not deploying copper cables over 8 which services are or will be provided. BellSouth concurs that CLECs generally 9 do not place copper loop facilities. Nonetheless, CLECs are deploying 10 analogous network facilities over which loops are transported, namely fiber optic-11 based transmission systems. 12 Q. ON PAGE 21 OF HIS TESTIMONY, MR. BRADBURY ASSERTS CLECs MUST 13 14 "INSTALL AND MAINTAIN THE EQUIPMENT NECESSARY TO DIGITIZE AND, USING CONCENTRATION AND MULTIPLEXING TECHNIQUES, AGGREGATE 15 16 THE TRAFFIC ON THOSE LOOPS TO PERMIT CONNECTIONS TO THE 17 CLEC's SWITCH AT ACCEPTABLE QUALITY LEVELS..." DO YOU AGREE? 18 19 Α. No. CLECs need not perform this function for themselves, as Mr. Bradbury 20 apparently believes. To the contrary, BellSouth's Unbundled Loop Concentration 21 ("ULC") offer aggregates and digitizes the loops in a given BellSouth central

25

22

23

24

office for delivery to the CLEC's collocation arrangement. Please see

for details of BellSouth's offer.

BellSouth's Interconnection website (http://www.interconnection.bellsouth.com/)

Q. ON PAGE 26 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES A CLEC'S
USE OF DIGITAL LOOP CARRIER ("DLC") EQUIPMENT WITHIN THE CLEC'S
COLLOCATION ARRANGEMENT AND STATES "WHILE THIS DLC
EQUIPMENT IS ABSOLUTELY MANDATORY FOR THE CLEC, IT IS NOT
REQUIRED FOR THE ILEC WHEN SERVING THE SAME CUSTOMERS."
PLEASE RESPOND.

Α.

While I agree that CLECs will use DLC equipment (either self-provided or via BellSouth's ULC offer I discussed earlier), DLC equipment is useful not for differences in transmission quality alluded to by Mr. Bradbury, but rather by the economics achieved as a result of concentrating individual loops for conveyance to the CLEC's switch which, under Mr. Bradbury's assumption, is housed somewhere other than within BellSouth's central office.

Q. ON PAGE 28 OF HIS TESTIMONY, MR. BRADBURY STATES "DLC EQUIPMENT IS NOT DESIGNED TO, AND THEREFORE CANNOT, SCALE PRECISELY WITH THE LEVEL OF DEMAND (OR NUMBER OF LINES)

SERVED IN A WIRE CENTER." PLEASE ELABORATE ON THIS POINT.

Α.

Mr. Bradbury is correct to a certain point. What he fails to point out, however, is that few, if any, electronic devices used in a modern telecommunications network are smoothly scalable. Instead, to improve the cost efficiency of their products, manufacturers offer devices with stated levels of capacity. Once the devices are installed, the service provider (whether the CLEC or the ILEC) need not augment network capacity simply to provide service to one more customer. Indeed, most

1		products (from a loaf of bread to airplane seats) are offered in capacity units,
2		which the producer believes to be proper increments. Contrary to Mr. Bradbury's
3		assertion that DLC investment is very "lumpy", I would point out that Mr.
4		Bradbury has chosen to support his example with DLC equipment in the very
5		largest increment commercially available (that is, the Alcatel LiteSpan 2000).
6		There are numerous providers of DLC equipment with "start up" levels far smaller
7		than that of the LiteSpan 2000. In fact, the AT&T model allows a choice from
8		three (3) sizes of DLC, the LiteSpan being the largest, but CLECs may also place
9		smaller DLC to scale to offices with smaller demand. See Turner Exhibit SET-2,
10		Section II.B.1.a, page 13.
11		
12	Q.	ON PAGE 29 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES DIGITAL
13		CROSS CONNECTION ("DSX") EQUIPMENT AND ATTRIBUTES IT WITH THE
14		SAME LUMPINESS AS FOR DLC EQUIPMENT. WHAT IS YOUR REACTION?
15		
16	A.	Here again, although DSX equipment is available in various capacity increments,
17		Mr. Bradbury chooses to support his example using a piece of equipment (that is,
18		the DSX-3) that provides the greatest amount of capacity rather than choosing
19		some smaller device such as the DSX-1. If the CLEC has a smaller amount of
20		expected demand, it could use the smaller device, notwithstanding Mr.
21		Bradbury's suggestion to the contrary.
22		
23	Q.	ON PAGE 32 OF HIS TESTIMONY, MR. BRADBURY DESCRIBES THE WORK
24		STEPS IN THE TRANSFER OF A WORKING LOOP FROM THE ILEC's
25		SWITCH TO THE CLEC's SWITCH. IS HIS DESCRIPTION ACCURATE?

A. While Mr. Bradbury has correctly noted the work steps involved, it is ironic that earlier in his testimony (see page 9 of Mr. Bradbury's testimony) he decries this process as insufficient compared to processes that do not involve these physical work steps (the UNE-P transfer or a PIC change). Further, a "hot cut" process with accompanying physical work steps is likewise required whenever BellSouth "win backs" a customer previously served by a CLEC. Thus, any acquisition costs related to "hot cuts" are appropriately considered a cost of doing business for both ILECs and CLECs.

Q. ON PAGE 37 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES LOOPS SERVED BY INTEGRATED DIGITAL LOOP CARRIER ("IDLC") EQUIPMENT AND STATES "FOR EXAMPLE, IF THE ILEC'S DATABASE DOES NOT REVEAL THE PRESENCE OF IDLC BEFORE A CONVERSION DATE IS COMMITTED TO THE CUSTOMER, THE CLEC MUST NEGOTIATE A NEW DATE WITH THAT CUSTOMER, WHICH OF COURSE MAKES A NEGATIVE IMPRESSION." PLEASE RESPOND.

A. BellSouth's database (that is, Loop Facilities Assignment and Control System or "LFACS") includes indicators as to whether a given loop is provided via IDLC equipment. Through the loop makeup process, the CLEC can readily determine the presence of IDLC in a given instance and negotiate due dates with the CLEC's customer accordingly. See the testimony of BellSouth witness Ronald Pate for a fuller discussion of this topic.

Q. ON PAGE 37 OF HIS TESTIMONY, MR. BRADBURY DISCUSSES IDLC

1		ARRANGEMENTS AND DIGITAL SUBSCRIBER LINE ("DSL") SERVICE. HE
2		STATES "ADDITIONALLY, EXCEPT WHEN THE IDLC SERVED CUSTOMER
3		CAN BE PLACED ON A COPPER LOOP LESS THAN 18,000 FEET IN
4		LENGTH, CLECs ARE DENIED THE CAPABILITY OF PROVIDING DSL
5		SERVICES TO THEIR CUSTOMERS." IS THAT A CORRECT STATEMENT?
6		
7	A.	No. As Mr. Bradbury himself points out, even BellSouth must make alternative
8		arrangements to provide DSL service to those of its customers served by DLC.
9		In such a case, BellSouth must place its Digital Subscriber Line Access
10		Multiplexer ("DSLAM") in the remote terminal rather than in the central office. A
11		CLEC that sought to provide DSL service to its customers could likewise
12		collocate its DSLAM at the remote terminal.
13		
14	Q.	ON PAGE 38 OF HIS TESTIMONY, MR. BRADBURY STATES "BECAUSE
15		THE CLEC DOES NOT HAVE THE ECONOMIES OF SCALE TO DIRECT
16		CONNECT ITS SWITCH WITH EFFICIENT INTER-OFFICE TRUNK GROUPS
17		TO EACH OF THE ILEC'S LOCAL SWITCHES, THE CLEC WILL BE MORE
18		RELIANT ON THE ILEC'S TANDEM NETWORK FOR THE EXCHANGE OF
19		TRAFFIC." WHAT IS YOUR RESPONSE?
20		
21	A.	Whether or not it is economical to have direct trunks between a particular pair of
22		local switches in a local calling area is a function of the amount of traffic to be
23		handled and the distance between those two switches. Although Mr. Bradbury's
24		testimony would lead one to believe that CLECs must interconnect at a tandem
25		for all their local traffic, that simply is not true. BellSouth allows (and some

CLECs have elected) the interconnection directly between the BellSouth end office switch and the CLEC's switch rather than at the tandem. Those same factors affect BellSouth's decision whether to have direct trunking between certain of its end office switches, and it is not uncommon for the traffic between two BellSouth end offices in a given local calling area to be handled solely via tandem switching connecting the two end offices. Thus, BellSouth faces exactly the same challenges regarding cost efficiency and customer services, as does the CLEC in such cases.

Rebuttal to Mr. Turner

Q. ON PAGES 4-5 OF HIS TESTIMONY, MR. TURNER STATES "...IN THE ABSENCE OF UNBUNDLED LOCAL SWITCHING, CLECs FACE PRACTICALLY INSURMOUNTABLE COST DISADVANTAGES RELATIVE TO THE INCUMBENT LOCAL EXCHANGE CARRIERS ("ILECs") IF UNBUNDLED NETWORK ELEMENT LOOPS ("UNE-Ls") USED IN CONJUNCTION WITH THEIR OWN (OR A THIRD PARTY PROVIDER'S) SWITCHING IS THE SOLE OPTION FOR PROVIDING LOCAL SERVICES TO MASS MARKET CUSTOMERS." DO YOU AGREE WITH MR. TURNER'S CONCLUSION IN THIS REGARD?

A. No. The cost analysis that accompanies Mr. Turner's testimony is fatally flawed in several respects. Once corrections are made to the assumptions underpinning Mr. Turner's analysis, it is clear that any cost "disadvantage", to use Mr. Turner's phrasing, is much smaller than he predicts and thus does not impair a CLEC's ability to compete.

Q. IN WHAT WAYS IS MR. TURNER'S ANALYSIS FLAWED?

- A. Mr. Turner's analysis hinges on determining costs that a CLEC would incur in acquiring and servicing a customer that an ILEC allegedly would not also incur.

 This is the basis of his determination of an "absolute cost disadvantage." As the following paragraphs will make clear, however, the assumption underlying Mr.

 Turner's analysis about costs that he attributes to CLECs but not to ILECs is simply incorrect. Briefly, Mr. Turner's analysis is wrong for the following reasons:
 - Mr. Turner attributes "hot cut" costs to each and every customer that might choose service from a CLEC. While Mr. Turner is correct that the CLEC will incur costs associated with the hot cut to disconnect the loop serving the customer from BellSouth's switch and then re-connect the loop to the CLEC's switch, he ignores the fact that in cases where a customer chooses to return to the ILEC, those same work steps and the related costs (disconnection of the serving loop from the CLEC's switch and re-connecting the loop to the ILEC's switch) and associated costs will likewise be incurred by the ILEC.
 - Mr. Turner attributes costs to perform Local Number Porting ("LNP") activities to the CLEC but does not likewise attribute those same costs to ILECs in cases where the customer chooses to return to the ILEC. In other words, the work steps required to "port" the telephone number from BellSouth's network to the CLEC's network are required to "port" the telephone number from the CLEC's network to BellSouth's network.
 - Mr. Turner's analysis assumes that an efficient CLEC will collocate in

every ILEC end office in which the CLEC has or will have mass market customers. For reasons Mr. Turner does not explain in his testimony, he assumes that CLECs will not make use of so-called Enhanced Extended Links ("EELs"), which reduce the quantity of collocation arrangements in a given Local Access Transport Area ("LATA") to as few as one.

Mr. Turner's Facility Ring Processor ("FRP") tool used in his analysis does not reduce the total facility costs by the amount of the capacity required to handle that portion of the capacity used that is not for "backhauling" loops and that is not used for "enterprise" customer traffic, but instead is used to carry interconnection traffic (that is, voice calls between the CLEC's customers and the customers of other local service providers including but not limited to other CLECs and ILECs). Here again, both ILECs and CLECs incur costs of transporting calls between and among the networks of various local service providers. However, Mr. Turner incorrectly leaves those costs in as part of his "absolute disadvantage" calculation.

Q. WHAT CORRECTIONS SHOULD BE MADE TO THE ASSUMPTIONS UNDERLYING MR. TURNER'S ANALYSIS?

- A. Corrections should be made to each of the areas I discussed above. Once the following corrections are made, the "absolute disadvantage" costs he attempts to calculate is reduced:
 - Hot cut costs should be eliminated from Mr. Turner's model as those

1		costs are incurred by both CLECs and ILECs as part of customer
2		acquisition or reacquisition. Mr. Turner suggests that perhaps as much
3		as 5% customer churn between local service providers per year might
4		occur. Taking this churn into account leads to the conclusion that all
5		local service providers using their own or a third party's switches will
6		incur hot cut costs.
7		LNP costs should be eliminated from Mr. Turner's model as those
8		costs are incurred by both CLECs and ILECs as part of customer
9		acquisition or reacquisition.
10		"Backhaul" costs should be reduced from the levels shown in Mr.
11		Turner's model to account for the use of EELs instead of collocation in
12		certain ILEC central offices. The use of EELs assumes that UNE
13		transport is available for the interoffice transport portion of the EEL.
14		Even if BellSouth were to receive relief from providing transport in
15		certain instances, the CLEC could then use commingled UNE loops
16		and special access transport.
17		"Backhaul" costs should be reduced from the levels shown in Mr.
18		Turner's model to eliminate costs associated with conveying
19		interconnection traffic from the CLEC's network to the networks of
20		other local service providers.
21		
22	Q.	ARE THE ADJUSTMENTS YOU DESCRIBE ABOVE THE ONLY
23		ADJUSTMENTS YOU BELIEVE SHOULD BE MADE?
24		

No. There is one other adjustment that should be made that will reduce even

25

A.

1		further Mr. Turner's "absolute disadvantage". That adjustment addresses Mr.
2		Turner's suggestion that ILECs may assess a minimum square footage charge
3		for collocation. In accordance with the FCC's rules, BellSouth offers cageless
4		collocation without any minimum square footage requirement. Instead, the CLEC
5		can acquire floor space amounts as small as that required for a single equipment
6		bay, which Mr. Turner's analysis ignores.
7		
8	Q.	DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?
9		
10	A.	Yes.